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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,298	08/01/2001	Philipp W. Kutter	22358-04989	5647

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EXAMINER
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FOWLKES, ANDRE R

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/921,298	<b>Applicant(s)</b> KUTTER, PHILIPP W.	
	<b>Examiner</b> Andre R. Fowlkes	<b>Art Unit</b> 2122	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/10/01</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-20 are pending.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is directed to "storing intermediate states of an execution process"; however, the storage location/device is not pointed out or distinctly claimed and therefore the claim is indefinite.

The rejection of the base claim is necessarily incorporated into the dependant claims.

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The invention, as disclosed in claim 1, is directed to non-statutory subject matter. While the claim is in the technological arts, it is not limited to "a practical application of an abstract idea which produced a useful, concrete, and tangible result." State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, claim 1 is directed to a method for the direct execution of an XML-document, comprising: defining the local behavior and process for each element of the XML-document; integrating executable instructions with at least one XML-document or a document type definition (DTD); and storing intermediate states of the execution process by dynamically creating and redefining element attributes. If this method is not tied to a memory and some sort of computer readable medium, it can be interpreted to be a software program, per se. Thus, Applicants fail to disclose that this method is tangibly embodied and executed by a piece of hardware and that its functions have practical applications which produce useful, concrete, and tangible results under the State Street Formation.

On this basis, claims 2-10, which depend from claim 1, are also rejected under 35 U.S.C. 101 for the same reasons.

Additionally, claim 6 is directed to modules that define a process for each element, where the modules are valid with respect to the following DTD:

```
<!element module (derived*, expression?, state*, module*)> <!attlist module name  
CDATA #REQUIRED number CDATA "1"> <!element derived (argument*, expression)>
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<!attlist derived name CDATA> <!element argument EMPTY> <!attlist argument name CDATA> <!element state (action\*, transition\*)> <!attlist state name CDATA> <!element transition (expression, path)> <!element path (component\*)> <!attlist path state CDATA "initial"> <!element component (component\*)> <!attlist component name CDATA #REQUIRED number CDATA "1"> <!element expression (path .vertline. self .vertline. src .vertline. trg .vertline. evalattr .vertline. getfirst .vertline. getnext .vertline. parent .vertline. root .vertline. apply .vertline. external .vertline. constant> <!element action (setattr .vertline. ifthen .vertline. forall .vertline. external)> <!element src EMPTY> <!element trg EMPTY> <!element self EMPTY> <!element evalattr (expression\*)> <!attlist evalattr attribute CDATA #REQUIRED> <!element getfirst (expression\*)> <!attlist getfirst attribute CDATA #REQUIRED> <!element getnext (expression\*)> <!element parent (expression\*)> <!element root EMPTY> <!element apply (expression, expression\*)> <!attlist apply op CDATA #REQUIRED> <!element external (expression\*)> <!attlist external name CDATA language CDATA> <!element constant EMPTY> <!attlist constant value CDATA #REQUIRED> <!element setattr (expression?, expression)> <!attlist setattr attribute CDATA #REQUIRED> <!element ifhenelse (expression, action\*)> <!element forall (action\*)> <!attlist forall range CDATA "all-elements" variable CDATA>.

These modules can be interpreted to be a software program, per se. Thus, Applicants fail to disclose that this method is tangibly embodied and executed by a piece of hardware and that its functions have practical applications which produce useful, concrete, and tangible results under the State Street Formation.

### ***Drawings***

6. The drawings are objected to because drawings 6a, 6b and 20 are informal. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2122

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by De Boor et al. (De Boor) U.S. Patent No. 6,173,316.

As per claim 1, De Boor discloses a **method for the direct execution of an XML-document**, (col. 3:58-67, "providing a wireless communication device with an MMI (i.e. browser) that is based on a markup language (i.e. XML). A markup language is a computer programming language that allows the content of a page or a screen display to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen, or other data which can be interpreted by some automatic system responsible for displaying, manipulating or modifying the content", and col. 9:45-51, "The present invention is not limited to HTML, but also operates with, and may extend any other markup language, such as SGML, or XML"), **comprising:**

**- defining the local behavior and process for each element of the XML-document** (col. 3:59-66, "A markup language (i.e. XML) is a computer programming language that allows the content of a page or a screen display (i.e. local behavior and process) to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen"),

**- integrating executable instructions with at least one XML-document or a document type definition (DTD)** (col. 3:58-60, "providing a wireless communication device with an MMI (i.e. browser) that is based on a markup language (i.e. XML).", and this process is essentially the integration of the executable instructions with the XML document),

**- storing intermediate states of the execution process by dynamically creating and redefining element attributes** (col. 62:9-10, "(intermediate states of the process are stored and) replacing the tag with the second markup language page to form a combined markup language page (i.e. the elements are redefined)").

As per claim 2, the rejection of claim 1 is incorporated, and further De Boor discloses that:

**- integrating executable instructions by defining for each XML-element definition and its instances an action made up of executable actions, and actions which are references to either the action defined for one of the components of the element or to an action defined for any other element of the XML document** (col.



3:58-67, "providing a wireless communication device with an MMI that is based on a markup language (i.e. executable instructions integrated with XML documents). A markup language is a computer programming language that allows the content of a page or a screen display to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen, or other data which can be interpreted by some automatic system responsible for displaying, manipulating or modifying the content"),

**- executing an XML-document by executing the action defined for the root of the XML document** (col. 3:59-66, "A markup language (i.e. xml document) is a computer programming language that allows the content of a page or a screen display to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen, or other data which can be interpreted by some automatic system responsible for displaying, manipulating or modifying the content").

As per claim 3, the rejection of claim 1 is incorporated, and further De Boor discloses that **defining a composition of the action for at least one XML-element definition or instance by graphical flow charts** (col. 7:36-38, "a flowchart of the operation of the HTMLp content handler in processing a string input associated with a user interface gadget", and col. 9:49-51, "The present invention is not limited to HTML, but also operates with, and may extend any other markup language, such as SGML, or XML").

As per claim 4, the rejection of claim 1 is incorporated, and further De Boor discloses **defining the composition of the action for at least one XML-element definition or instance in textual form** (col. 3:59-66, "A markup language (i.e. xml document) is a computer programming language that allows the content of a page or a screen display to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instruction for the layout of the content on the page or screen (i.e. composition of the action), or other data which can be interpreted by some automatic system responsible for displaying, manipulating or modifying the content").

As per claim 5, the rejection of claim 1 is incorporated, and further De Boor discloses:

- **representing system states** in terms of n-dimensional data cubes (col. 23:46-47, "determine the initial state of a form in a page", and one can store system states well known formats such as in data cubes or n-dimensional arrays),

- **providing an open interface by making the state information readable and writeable for other programming and database systems** (col. 23:42-47, "There are a number of extensions of HTML in the present invention that allow pages to be designed using a standard HTML editor, using arguments passed (through an open interface) by C code to complete form entry fields, or specifying data to be fetched on the fly from the device to determine the initial state of a form in a page"),

- **making data structures and functionalities of other programming and database systems accessible using executable instructions** (col. 23:42-47, "There are a number of extensions of HTML in the present invention that allow pages to be designed using a standard HTML editor, using arguments passed (using executable instructions) by C code to complete form entry fields, or specifying data to be fetched on the fly from the device to determine the initial state of a form in a page").

As per claim 6, the rejection of claim 1 is incorporated, and further De Boor discloses **modules that define a process for each element, where the modules are valid with respect to** a specific **DTD** (col. 3:59-66, "A markup language (i.e. XML) is a computer programming language that allows the content of a page or a screen display (i.e. local behavior and process) to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen", and validating modules with respect DTDs is a well known practice used with XML).

As per claim 7, the rejection of any one of the preceding claims is incorporated, and further De Boor discloses a **system for use with the method according to one of the preceding claims**, (col. 59:35-68:66, "The markup language based man-machine interface", as disclosed in the claims), **comprising:**

- **a server providing services to at least one client by executing at least parts of a XML-document according to a XML-robot specification sent from the**

**client to the server or a server providing services to at least one client by sending a XML-robot specification and a XML-document to the client, such that said service is provided by executing of at least part of the sent document on the client according to the sent XML-robot specification** (col. 9:49-51, "providing a wireless communication device with an MMI (i.e. browser) that is based on a markup language (i.e. XML). A markup language is a computer programming language that allows the content of a page or a screen display to be defined by the inclusion of predefined symbols in the content itself indicating the logical components of the content, instructions for the layout of the content on the page or screen, or other data which can be interpreted by some automatic system responsible for displaying, manipulating or modifying the content", and (below fig 14 and multi part forms) col. 30:14-22, "the data from each form (i.e. xml document) to be transmitted to the server as part of the URL that fetches the next form. The server then takes the data passed in the URL and returns a page that must be generated on-the-fly with the passed-in data from the previous forms included as "hidden" type input elements in the form in the returned page").

As per claims 8-20 , De Boor also discloses such claimed limitations as addressed in claims 1, 3, 6 and 7 above.

### ***Conclusion***

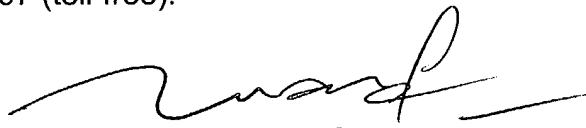
After October 25, 2004, the examiner can be reached at new telephone number (571) 272-3697, and the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (703)305-8889. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703)305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARF



TUAN DAM  
SUPERVISORY PATENT EXAMINER